

REMARKS

Claims 1-22 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Applicants traverse the rejection of Claims 1-22 under 35 U.S.C. § 102(b) as being anticipated by Suzuki (U.S. Pat. No. 5,786,651).

Referring now to Claim 1, Suzuki does not show, teach or suggest a first undercut portion that is formed in a radially inner surface of said outer rim section and that receives winding wire.

Suzuki shows a contracted portion 6c of a projection 6 that is formed at one end of an outer rim section. A contracted portion 7c of a groove 7 is formed at an opposite end of the outer rim section. The contracted portion 6c of one stator segment mates with or receives the contracted portion of an adjacent stator segment 7c to reduce circumferential play. Col. 5, lines 60-65. Neither of the contracted portions 6c nor 7c receive winding wire as claimed.

Referring now to claims 2, Suzuki does not show, teach or suggest locating the first undercut portion adjacent to the radially inner surface of the tooth section as claimed.

The contracted portions 6c and 7c are formed at opposite ends of the outer rim section and not adjacent to the tooth section.

Referring now to Claim 3, Suzuki et al does not show, teach or suggest that the first undercut portion increases slot area and/or increases winding wire that can be wound around the tooth section.

Because the contracted portion 6c is matingly received by the contacted portion 7c, the contacted portion 6c does not increase slot area as claimed or increase winding wire that can be wound around the tooth section. The windings 5 as shown in FIG. 1A of Suzuki do not relate whatsoever to the contracted portion 6c.

Referring now to Claim 4, Suzuki et al does not show, teach or suggest receiving a start turn of winding wire in the first undercut portion.

The contracted portion 6c receives the contacted portion 7c, which is not a start turn of winding wire.

The remaining claims 5 and 6 are directly and/or indirectly dependent upon claim 1 and are allowable for the same reasons.

Referring now to Claim 7, Suzuki does not show, teach or suggest a first undercut portion that is formed in a radially inner surface of the outer rim section and that receives winding wire.

As discussed above, Suzuki shows a contracted portion 6c of a projection 6 that is formed at one end of the outer rim section. A contracted portion 7c of a groove 7 is formed at an opposite end of the outer rim section. The contracted portion 6c of one stator segment mates with or receives the contracted portion of an adjacent stator segment 7c to reduce circumferential play. Col. 5, lines 60-65. Neither of the contracted portions 6c nor 7c receive winding wire as claimed.

Referring now to claim 9, Suzuki does not show, teach or suggest first and second endcaps that are located adjacent to opposite face surfaces of said stack and that include third and fourth undercut portions that register with said first undercut portion.

As disclosed above, Suzuki does not disclose the first undercut portion as claimed in claim 7. Suzuki also does not disclose endcaps with undercut portions that register with the first undercut portion.

The remaining claims 8 and 10-18 are directly and/or indirectly dependent upon claim 7 and are allowable for the same reasons.

Referring now to claim 19, Suzuki does not show, teach or suggest a first undercut portion formed in a radially inner surface of the outer rim section adjacent to the center section.

Suzuki shows a contracted portion 6c of a projection 6 that is formed at one end of the outer rim section. A contracted portion 7c of a groove 7 is formed at an opposite end of the outer rim section. The contracted portions 6c and 7c are formed at opposite ends of the outer rim section and are not located adjacent to the tooth section.

The remaining claims 20-22 are directly and/or indirectly dependent upon claim 19 and are allowable for the same reasons.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is

believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1211.

Respectfully submitted,

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ATTACHMENT FOR SPECIFICATION AMENDMENTS

The following is a marked up version of each replacement paragraph and/or section of the specification in which underlines indicate insertions and brackets indicate deletions.

Please replace Paragraph [0002] with the following paragraph:

[0002] Electric machines, such as motors and generators, typically include a stationary stator that defines salient poles and inter-pole slots that are located between the salient poles. The electric machines also include a rotor that defines rotor poles and that rotates relative to the stator. In brushless permanent magnet (BPM) electric machines, the stator is often segmented. In U.S. Patent Serial No. [_____] 09/803,876 that is entitled "Segmented Stator Switched Reluctance Machine" and that is commonly assigned, a segmented stator for a switched reluctance machine is disclosed.

ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and brackets indicate deletions.

1. (Amended) A stator plate for a stator segment assembly of a stator of an electric machine comprising:

an outer rim section that includes a radially inner surface;

a tooth section extending radially inwardly from said outer rim section; and

a first undercut portion that is formed in said radially inner surface of said outer rim section and that receives winding wire.

3. (Amended) The stator plate of claim 1 wherein said first undercut portion increases slot area and allows additional winding wire to be wound around said [first] tooth section.

7. (Amended) A stator segment assembly for a stator of an electric machine comprising:

a stator core including a stack of stator plates, each of said stator plates including an outer rim section, a tooth section extending radially inwardly from said outer rim section, a radially inner surface of said outer rim section that is generally perpendicular to said tooth section, and a first undercut portion that is formed in said radially inner surface of said outer rim section and that receives winding wire.